



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/027,345	12/20/2001	Steve Y. Chang	884.690US1	9612
21186	7590	11/17/2004	EXAMINER, PHAN, THANH S	
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A. P.O. BOX 2938 MINNEAPOLIS, MN 55402			ART UNIT	PAPER NUMBER

2841

DATE MAILED: 11/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/027,345

Applicant(s)

CHANG ET AL.

Examiner

Thanh S Phan

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-56 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 5, 8, 10, 14, 15, 18, 20-24, 27, 31, 33, 43, 46, 47, 52, 55 and 56 are rejected under 35 U.S.C. 102(b) as being anticipated by Collins et al. [6,018,125].

Collins et al. disclose an electronic component [figure 2] mounted within a chassis [10] (a computer which having at least one CPU chip not explicitly labeled) including a polymer electromagnetic interference (EMI) shield [14] comprising: a waveguide body including an array of circular waveguide cells [18] each having a contiguous inner surface; and an absorber layer [column 2, lines 60-61] covering at least a portion of each contiguous inner surfaces and capable of absorbing electromagnetic radiation over a select frequency range.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 9, 12, 13, 16, 19, 34, 39-42, 44-45, 48-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collins et al.

Art Unit: 2841

Regarding claims 9, 12, 13, 16, 19, 39-42, 44, 45, 48-50, Collins et al. disclose the claimed invention except for the specific material used. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to a specific material for manufacturing a product, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of engineering choice. In re Leshin, 125 USPQ 416.

Regarding claim 34, Collins et al. disclose the claimed invention except for the specific dimension of the apertures. It would have been obvious to one of ordinary skill in the art at the time of the invention was made use a specified dimension, since such a modification would have been involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955).

Claims 2, 4, 15, 35, 12 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collins et al. in view of Mitchell [6,426,459].

Regarding claims 2 and 12, Collins et al. disclose the instant claimed invention except for: each waveguide cells having a polygonal crosssection, and the shield being formed of a metallic material.

Mitchell discloses a waveguide shield [10] formed of metal having polygonal shape cells.

It would have been obvious to a person having ordinary skill in the art at the time invention was made to use the shield design of Mitchell for the shield design of Collins et al. for the purpose of improving ventilation.

Art Unit: 2841

Regarding claims 4, 15, 35 and 53-54, Collins et al. as modified by Mitchell does not disclose the specific claimed shape. However, it would have been obvious to modify Collins et al. as modified by Mitchell by having a specific shape cell with different type of configurations since applicant have presented no explanation that these particular configurations of the cells are significant or are anything more than one of numerous configurations a person of ordinary skill in the art would find obvious for the purpose of providing a cross section between the two walls. A change in shape is generally recognizing as being within the level of ordinary skill in the art. In re Dailey, 149 USPQ 47 (CCPA 19760).

Regarding claims 7, 29, 30, 37, 38, Collins et al. as modified by Mitchell disclose the claimed invention except for explicitly mentioned the resistivity and frequency range. The examiner takes official notice that these ranges are inherent characteristic of a copper compound.

Claims 6, 17, 25, 32, 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Collins et al. as modified by Mitchell in view of Clement et al. [US 6,809,254].

Collins et al. as modified by Mitchell disclose the claimed invention except for the thickness of the absorbing layer is between .025 mm and .25 mm

Clement et al. disclose an electronics enclosure having an interior shielding comprising a shielding layer [14] having a thickness between .025 mm and .25 mm

It would have been obvious to one of ordinary skill in the art at the time of the invention was made to use an absorbing layer having a thickness between .025 mm

and .25 mm as teach by Clement et al. with Collins et al. as modified by Mitchell to effectively providing EMI shielding.

Regarding claim 26, to use screws to attach the shielding to the chassis would have been obvious in order to securely mounted the shield thereto.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Collins et al. in view of Narang et al. [5,976,666].

Collins et al. disclose the instant claimed invention except for: the absorber layer including an epoxy resin filled with particles having a high magnetic loss over the select frequency range.

Narang et al. disclose an absorber layer for an EMI shield including an epoxy resin filled with particles having a high magnetic loss over the select frequency range [abstract].

It would have been obvious to a person having ordinary skill in the art at the time invention was made to use magnetic particles in the absorber layer of Collins et al. for the purpose of controlling frequencies.

Response to Arguments

Applicant's arguments filed 04/23/04 have been fully considered but they are not persuasive. Applicant argues fails Collins [US 6,018,125] fails to read on the claimed invention. The examiner disagrees, as acknowledge by the applicant, "This coating of Collins is conductive and reflective, not absorbing." The material used by Collins (nickel over copper) conducts, reflects and absorbs to some degree all electromagnetic radiation. Applicant has not claimed nor the examiner considered any specific structure

Art Unit: 2841

or specification regarding the "absorbing" layer. Further still, no particular degree of absorption is claimed. Therefore, because any conductor absorbs to some degree, it meets the claimed limitation. For the foregoing reasons, the claims continue to be anticipated by Collins and the cited references. Accordingly, the examiner's rejection is upheld.

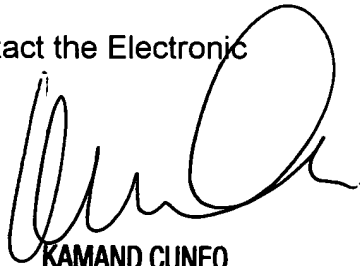
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh S Phan whose telephone number is 571-272-2109. The examiner can normally be reached on M-F 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on 571-272-1957. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tsp



KAMAND CUNEO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800